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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/388,857 09/01/99 TRAN

L MI22-878

EXAMINER

021567 MMC2/0206  
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ART UNIT

PAPER NUMBER

2813  
DATE MAILED:

02/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/388,857

Applicant(s)

Tran

Examiner

Laura Schilling r

Group Art Unit

2813

☒ Responsive to communication(s) filed on Sep 1, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 835 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-50 is/are pending in the applicat

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-50 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-7, drawn to a method of forming a transistor including a trench, classified in class 438, subclass 242.
  - II. Claims 8-14, drawn to a method of forming a pair of FETs, classified in class 362, subclass 69.
  - III. Claims 15-20, drawn to a method of forming an IC, classified in class 264, subclass 272.17.
  - IV. Claims 26-30, drawn to a method of forming two series of FETs, classified in class 327, subclass 436.
  - V. Claims 31-33, drawn to a method of forming a DRAM, classified in class 505, subclass 834.
  - VI. Claims 34-40 and 44-50, drawn to a transistor assembly, classified in class 29, subclass 888.46.
  - VII. Claims 41-43, drawn to a DRAM device, classified in class 257, subclass 67.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions V and VII are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be

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used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the active region may be formed by doping, field oxidation regions, or trenches.

3. Inventions 1-IV, VI, and (V-VII) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions and effects.

4. Group I pertains to a method of forming a transistor including the formation of a trench, this has a materially different function and effect from the Groups below:

5. Group II pertains to a method of forming a pair of FETs, field effect transistors are unipolar transistors whose function depends solely on majority carriers and thus has different effects and functions from the Group above and the Groups below:

6. Group III pertains to a method of fabricating an integrated circuit which is a circuit capable of comprising multiple transistors, resistors, diodes, and capacitors, thus resulting in a materially different function and effect from the Groups above and below:

7. Group IV pertains to a method of forming two sets of FETS, this method requires different series of varying active widths which results in a materially different function and effects from the Groups above and below:

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8. Group V and VII pertain to a DRAM (both method and device) which is a storage unit for digital information which renders it to have materially different functions and effects from the Groups above and the remaining Group below:

9. Group IV pertains to a transistor assembly, which connects several transistors together to function as a unit, such an assembly therefore has a materially different function and effect from the above Groups.

10. Because these inventions are distinct for the reasons given above and the search required for Groups I-VII are not required for each other, restriction for examination purposes as indicated is proper.

11. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Please further note that claims 21-25 were not placed in a Group for restriction. This is because the claim language is improper. Claim 21 recites in its preamble that it pertains to a method of forming two series of FETs however fails to recite any method limitations; rather it improperly recites only structural limitations thus rendering it a device claim. Consequently, Applicant is advised to amend the claim language and ensure that the amended language is in accordance with the election made.

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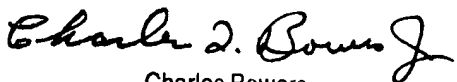
Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

*Conclusion*

Any inquiry concerning this communication from examiner should be directed to Laura Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached by telephone on Monday to Friday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Bowers, can be reached on (703) 308-2417. The fax phone number for the group is (703) 308-7722.

LMS



Charles Bowers  
Supervisory Patent Examiner  
Technology Center 2800

February 1, 2001